

MODULATION IN A MOBILE TELECOMMUNICATIONS SYSTEM**Abstract**

A method of communication of data in a mobile telecommunications network involves at a transmitter first grouping the data into a first sequence of bits and a second sequence of bits. There is then a step of modulating a signal with the bits of the first sequence so that the bits of the first sequence have a first level of communication error protection provided by the modulation and with the bits of the second sequence so that the bits of the second sequence have a second level of communication error protection provided by the modulation less than the first level of communication error protection. The signal is then transmitted. At a receiver, estimates of the bits of the first sequence from the signal are detected and contributions to the signal corresponding to the estimates are determined and cancelled from the signal so as to produce a modified signal. Estimates of the bits of the second sequence are then detected from the modified signal.

(Fig.2)